

**REMARKS**

Applicants submit herewith, as evidence in support of the patentability of the claims, a Declaration Under Rule 132 including appendices.

**The Rejections**

Claims 1, 5-8, 10-17, 20-23, and 28-29 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Schafroth (U.S. Patent 6,124,649) in view of Applicants' Admitted Prior Art (Applicants' specification, at 2) and Lin (U.S. Patent 4,176,362).

Applicants respectfully traverse the rejection and request reconsideration of the application for the following reasons.

**Applicants' Arguments**

Applicants incorporate by reference their arguments of Amendment (D) filed on December 20, 2005.

The rejection under § 103 is untenable for at least three reasons.

First, there are multiple deficiencies in the *prima facie* case of alleged obviousness, because the references fail to teach, or suggest, any of the following:

(I) conductive paths that include “a protective layer formed of a non-magnetic material selected from the group consisting of a nickel based alloy containing phosphorous and a palladium based alloy” as recited in independent claims 1 and 29;

- (II) conductive paths “made of essentially non-magnetic material selected from the group consisting of a nickel based alloy containing phosphorous and a palladium based alloy” as recited in claims 23 and 28;
- (III) “wherein the conductive paths disposed in proximity to the microgenerator are non-magnetic ...and do not brake the microgenerator” as recited in claims 28 and 29; or
- (IV) a timepiece with “conductive paths... made of essentially non-magnetic material” as recited in each independent claim.

Second, even if a *prima facie* case of obvious existed, which it does not, the evidence submitted herewith establishes unexpectedly superior results sufficient to rebut any *prima facie* case.

Third, there is no motivation to combine Schafrroth and Lin in the manner proposed by the Examiner.

#### Lack of *Prima Facie* Case of Obviousness

The Office Action of November 29, 2006 fails to address what Applicants pointed out in Amendment (D) filed on December 20, 2005, namely the lack of a *prima facie* case of obviousness on the first the three points (I) to (III) listed above. The references simply fail to teach a material “selected from the group consisting of a nickel based alloy containing phosphorous and a palladium based alloy” as recited in each of the independent claims in the context of either a conductive path or a protective layer of a conductive path – such a limitation appears in every independent claim. The references also fail to teach “wherein the conductive paths disposed in proximity to the

microgenerator are non-magnetic ...and do not brake the microgenerator" as recited in claims 28 and 29. For these reasons in this paragraph alone, the obviousness rejection is improper with regard to all of the current claims, and Applicants respectfully traverse and request withdrawal of the rejection.

Regarding point (IV) above, contrary to the Examiner's assertions, the references also fail to teach a timepiece with "conductive paths ... made of essentially non-magnetic material" as recited in each independent claim. The Applicants vigorously rebut the Examiner's assertion that Applicants have acknowledged that the materials used by Lin are non-magnetic. There is no such acknowledgement. The portion of Applicants' response cited by the Examiner for this point is simply where the Applicants have pointed out the position of the Examiner. On the contrary, Lin fails to teach use of non-magnetic materials, as discussed immediately below.

In the portion of Lin relied on by the Examiner to teach non-magnetic conductive paths (col. 11, lines 47-59), the reference reads:

The conductive trace, contact terminal and connection joint can be various conductive metals including copper, gold, nickel, palladium, tin, combinations thereof, and alloys thereof. Of common metallic materials, copper has especially low resistivity and cost. Furthermore, those skilled in the art will understand that in the context of a support circuit, a copper conductive trace is typically a copper alloy that is mostly copper but not pure elemental copper, such copper-zirconium (99.9% copper), copper-silver-phosphorus-magnesium (99.7% copper), or copper-tin-iron-phosphorus (99.7% copper). It is generally desirable to protect electroplated copper with another electroplated metal such as nickel, palladium or gold.

There is no mention of magnetic properties here. Indeed, the declaration of the expert Yves Guérin under 37 C.F.R 1.132 filed herewith, paragraph eight, also establishes that Lin fails to recite whether these materials have magnetic properties. Moreover, as noted in the present specification, page 3, lines 3-4, nickel-based alloys of the prior art have

ferromagnetic properties. Again, this is supported by the Guérin declaration, paragraph nine. No evidence of record indicates that Lin teaches non-magnetic conductive paths, rather all of the evidence shows the opposite. Because the references fail to teach a timepiece with “conductive paths . . . made of essentially non-magnetic material” as recited in each independent claim, Applicants further traverse the rejections of the claims under § 103.

**Experimental Evidence Shows Unexpectedly Superior Results**

The data shown in Appendix B of the Declaration of Yves Guérin under 37 C.F.R 1.132 filed herewith shows superior and unexpected results using a device according to the present invention as compared to the prior art. As noted in paragraph ten of the declaration, the experimental results indicate that there is a four-fold higher friction in the generator when using ferromagnetic conductive paths as compared to non-conductive paths, as recited in the claims. According to the specification, this is due to the absence (in the claimed invention) of parasitic forces (page 1, lines 24-26). The results in Appendix B are superior and unexpected so that they would overcome a *prima facie* case of obviousness, even if one were to be made in view of the prior art of record.

**Lack of Motivation to Combine Schafroth and Lin**

Moreover, there is no proper motivation to combine Schafroth and Lin as proposed by the Examiner. The Examiner has asserted that one “would have been motivated to select one of the non-magnetic materials of Lin for the conductive paths in order to improve conductivity.” However, the record contains no evidence that low

conductivity is a problem, or that any non-magnetic materials that may be disclosed by Linn would solve this problem. Moreover, any such materials may have countervailing disadvantages, such as increased costs. For lack of motivation to combine Lin with Schafroth, Applicants further traverse the rejection under § 103.

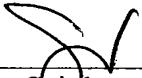
### **CONCLUSION**

The rejection of claims 1, 5-8, 10-17, 20-23, 26 and 27 under 35 U.S.C. § 103(a) is untenable and must be withdrawn because, as discussed above there are multiple deficiencies in the *prima facie* case, the experimental evidence is more than enough to overcome any such case, and there is no motivation to combine the references. For all of these reasons, a prompt notice of allowance is earnestly solicited.

Questions are welcomed by the below signed attorney of record for the  
Applicants.

Respectfully submitted,

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